

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

## PCT

### NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Rule 71.1)

<b>To:</b>  CHAS. HUDE A/S H.C. Andersens Boulevard 68 DK-1780 Copenhagen V DANEMARK		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 2px;">         Recd. 28          78139       </td> <td style="width: 30%; padding: 2px;">         Ing.          2-11       </td> </tr> <tr> <td colspan="2" style="text-align: center; padding: 5px;"> <b>- 8 SEP. 2004</b> </td> </tr> <tr> <td style="width: 30%; padding: 2px;">         AS 400          110       </td> <td style="width: 30%; padding: 2px;">         Til hvem          2-11       </td> </tr> </table>		Recd. 28 78139	Ing. 2-11	<b>- 8 SEP. 2004</b>		AS 400 110	Til hvem 2-11
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AS 400 110	Til hvem 2-11								
Applicant's or agent's file reference 78139 Zeu/ve		<b>IMPORTANT NOTIFICATION</b>							
International application No PCT/DK 03/00617	International filing date (day/month/year) 23.09.2003	Priority date (day/month/year) 26.09.2002							
Applicant INSTITUTTET FOR PRODUKTUDVIKLING et al.									

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**  
  
 The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).  
  
 Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.  
  
 For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.  
  
 The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.


Name and mailing address of the International preliminary examining authority:  <div style="display: flex; align-items: center;"> <div>             European Patent Office              D-80298 Munich              Tel +49 89 2399 - 0 Tx: 523656 epmu d              Fax: +49 89 2399 - 4465           </div> </div>	Authorized Officer  Marchetto, L  Tel +49 89 2399-2796
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## PATENT COOPERATION TREATY

## PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 78139 Zeu/ve	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA416)	
International application No PCT/DK 03/00617	International filing date (day/month/year) 23.09.2003	Priority date (day/month/year) 26.09.2002
International Patent Classification (IPC) or both national classification and IPC C23C18/18		
Applicant INSTITUTTET FOR PRODUKTUDVIKLING et al.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 3 sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand  19.04.2004	Date of completion of this report  06.09.2004	
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  Del Piero, G  Telephone No +49 89 2399-8579	



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/DK 03/00617**

**I. Basis of the report**

1. With regard to the elements of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-16 as originally filed

**Claims, Numbers**

1-16 filed with telefax on 19.08.2004

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/DK 03/00617**

**III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 1-11

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 1-11 are so unclear that no meaningful opinion could be formed (*specify*):

see separate sheet

☒ the claims, or said claims Nos. 1-11 are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos.

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the Standard.

☐ the computer readable form has not been furnished or does not comply with the Standard.

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	12-16
	No: Claims	
Inventive step (IS)	Yes: Claims	12-16
	No: Claims	
Industrial applicability (IA)	Yes: Claims	12-16
	No: Claims	

2. Citations and explanations

see separate sheet

III.

1.1. Claim 1 is obscure in scope due to the expression "adsorbing metal oxide" to which no definite technical meaning can be attached.

Moreover, this claim, in referring to "transition metal ions" and "catalytic metal ions", is speculative in scope and/or not sufficiently supported by the description which for these metals only specifies Co and Sn (the latter, incidentally, being not a transition metal) and Pt respectively.

The same point also applies to the "adsorbing metal oxide", which is exemplified only by  $\text{MnO}_2$  and  $\text{Fe}_2\text{O}_3$ .

1.2. None of claims 2 to 11, when incorporated into claim 1 according to the specified appendency, is such as to remove from claim 1 the totality of the deficiencies mentioned above.

Therefore, by implication, also claims 2 to 11 are obscure in scope and/or not sufficiently supported by the description.

V.

1.1. The method according to claim 12 is regarded as being clear and supported by the description.

The same consideration applies to the articles according to claims 13 to 16, however only insofar as claims 13 and 14 depend from claim 12.

1.2. Unlike the state of the art on record, according to the present invention the metal oxide is not removed from the surface of the article. Therefore, the skilled man would find in the prior art no hint at avoiding removal of the oxide and, on the contrary, utilising the same for the fixation of the transition metal ions and the subsequent reduction of the catalytic metal.

The possibility of applying a metal coating on types of plastics which otherwise cannot be satisfactorily coated after a pre-treatment according to the state of the art justifies the acknowledgment of an inventive step.